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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,422	03/12/2004	Trent C. Reusser	H0005612-1633	7124
128	7590	11/15/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC.			SWARTHOUT, BRENT	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2636	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/799,422	Applicant(s) REUSSER ET AL.	
	Examiner Brent A. Swarthout	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-12-04</u> . | 6) <input type="checkbox"/> Other: ____. |

1. Claims 4 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 10 have no antecedent basis for "the attitude direction indication".

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 1-7,10,11,13-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derman in view of Langner et al.

Derman discloses a method for displaying attitude, heading and navigation data on a single display comprising showing attitude direction indicator 15/16, and a compass rose 14 surrounding the display, except for display of terrain data.

Langner teaches desirability of displaying attitude direction indicator 176/177 in conjunction with compass 190 and terrain data (col.6, line 43).

It would have been obvious to display terrain data as suggested by Langner in conjunction with an ADI as disclosed by Derman with associated compass rose, in order to allow a pilot to view multiple desired data at once without having to switch screens, thus saving space and allowing display of more comprehensive data for providing safer flight conditions.

With regard to claims 2-3, Langner teaches use of altitude 180 and
airspeed 160 displays.

With regard to claim 4, attitude indicators typically move with
respect to a central position in order to indicate movement, when it is
desired to have a horizon line remain static.

Regarding claim 5, Langner teaches display of CDI (Fig. 1a).

3. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Derman in view of Langner et al. and Chen et al.

Chen teaches desirability when displaying terrain data with a primary flight
display of displaying the data in a top down 3-D view (figures 9-10, page 2, par.
25).

It would have been obvious to use a format for display as suggested by
Chen in conjunction with a terrain display as suggested by Derman and Langner,
in order to make terrain distinctions more easy to see, thus providing a pilot
greater protection against ground collision.

4. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Derman in view of Langner et al. and Von Viebahn et al.

Von Viebahn teaches desirability in a primary flight display system of having
display elements be transparent in order that superimposed information can be
viewed through the transparent objects (col. 4, lines 27-33).

It would have been obvious to utilize translucent indicators as suggested
by Von Viebahn in conjunction with attitude indicator as disclosed by Derman

and Langner, in order to allow a pilot to observe data which was displayed with attitude information, without the data being obscured by non-see-through elements.

5. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derman in view of Langner et al. and Naimer et al.

Naimer discloses displaying additional information with a primary flight display including airport and runway data (Fig. 4 and 5).

It would have been obvious to include runway/airport data with an attitude display as disclosed by Derman and Langner, in order to allow a pilot to observe a landing area as far as position with respect to runway and obstacles was concerned, to provide safer landings and takeoffs.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langner et al.


Langner teaches a display control device displaying terrain data along with heading, altitude, airspeed and course deviation information (Fig. 1a). Since Langner teaches a GUI based display, it would have been obvious to one of ordinary skill in the art to use algorithms and processor to display necessary data, since this is a conventional technique for controlling a display.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaiser, Wichgers, Dwyer, Watson and Crane disclose aircraft display devices.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent A Swarthout whose telephone number is 571-272-2979. The examiner can normally be reached on M-F from 6:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brent A Swarthout
Art Unit 2636

**BRENT A. SWARTHOUT
PRIMARY EXAMINER**